ABSTRACT

The present invention provides a surface-coated cutting tool comprising a coating film on a base, while the coating film comprises a hard layer constituted of a compound selected from a nitride, a carbonitride, an oxynitride and a carboxynitride of at least one primary element selected from a group consisting of the metals belonging to the groups 4a, 5a and 6a of the periodic table as well as B, Al and Si, and the hard layer satisfies the following: (a) (hmax – hf)/hmax is at least 0.2 and not more than 0.7, assuming that hmax represents the maximum indentation depth and hf represents the indentation depth (dent depth) after unloading in a hardness test according to nanoindentation, (b) the thickness of the hard layer is at least 0.5 µm and not more than 15 µm, and (c) the hardness according to nanoindentation is at least 20 GPa and not more than 80 GPa.

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